

## ALO 695-60

Setting and induction flex hardening of low alloy steel hand hacksaw blades



### CAPACITY:

Blade length:	250 - 320 mm
Blade width:	12 - 13 mm
Band thickness:	0.5 - 0.7 mm
Tooth pitch:	14 - 32 TPI
Production speed:	60 blades / min

### THE SYSTEM COMPRISES:

- Pay off magazine
- Setting unit
- Feed unit
- Hardening generator and inductor
- Closed coolant system
- Closed quench system



Pay off magazine with roller setter



Feed unit, hadening coil and quenchant chamber

## MACHINE DESCRIPTION

### Blade feed unit

The blades are fed from the pay off magazine, containing approx. 700 blades, to the roller setting machine where they are wavy set by two setting rolls. The rolls are adjustable in unison for overall set. Setting speed are controlled by a potentiometer and a frequency controller. The blades are fed into the feed unit by means of an air motor. Two pairs of feed rollers feed the blades into the inductor, placed in a quenchant chamber and immersed in the quenching medium.

In the inductor the teeth and the back edge are hardened and the rest remains soft, thus giving a very flexible blade. The blades are transported out of the inductor by means of two pairs of feed rollers. A 5th set of rollers removes the blades from the feeder and into a collect bin or similar.

### Generator

The generator is enclosed in an aluminium cabinet. The two sides of the generator are fitted with removable panels with special locks.

Controls, instruments and the HF output terminal are placed on the front of the generator, water and main connections on the opposite side. The output power is continuously controllable between 10 and 100%. The integral capacitor battery consists of 2 water cooled capacitors and can be regulated so as to be suitable for heat treatment of both magnetic and non-magnetic material. A maximum current breaker protects the generator in the event of a short circuit or overload.

### Inductor

The inductor is made of round copper tubing and is designed to simultaneously heat the teeth and the back of the blade. It is adjustable in height to permit optimization of the heat pattern. The inductor is interchangeable and can easily be replaced.

## TECHNICAL SPECIFICATION:

Blade length:	250 - 320mm
Blade width:	12 - 13mm
Band thickness:	0.5 - 0.7mm
Tooth pitch:	14 - 32 TPI
Capacity:	60 blades / min
Blade steel grade:	Carbon and low alloy steel
Air pressure:	6.3 bar
Standard voltage:	400VAC $\pm$ 10% 3-phase, 50-60 Hz $\pm$ 1% directly earthed system, other voltages available upon request.
Max output power hardening generator:	15 kW
Power consumption (at max output power):	30 kVA